

SEARCH REQUEST FORM

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Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

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Date completed: <u>4/22</u>	Search Site	Vendors
Searcher: <u>P. Schreiber 308-4792</u>	<u>✓</u> STIC	<u> </u> IG
Terminal time: <u>15</u>	<u>✓</u> CM-1 <u>6403</u>	<u> </u> STN
^{prep} Elapsed time: <u>6</u>	<u> </u> Pre-S	<u> </u> Dialog
CPU time: _____	Type of Search	<u> </u> APS
Total time: _____	<u> </u> N.A. Sequence	<u> </u> Geninfo
Number of Searches: _____	<u>5</u> A.A. Sequence	<u> </u> SDC
Number of Databases: <u>1</u>	<u> </u> Structure	<u> </u> DARC/Questel
	<u> </u> Bibliographic	<u>✓</u> Other <u>Compu</u>

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Schreiber, David

From: Yu, Misook
Sent: Monday, April 22, 2002 2:59 PM
To: Schreiber, David
Subject: 09/499,662

I have to additional search.

The application claims benefits to two prior abandoned applications, 09/053,583 and 09/408,646. Would you please compare SEQ.ID NO. 50, 52, 54, 109, and 89 of the current application with all of the SEQ ID of the two abandoned applications? I would like to know if the 5 sequences were in the prior applications.
Thank you very much.

Examiner Misook Yu, Ph.D.
703-308-2454 (Phone)
Art Unit 1642
CM1-8E18 (Room)
CM1-8E12 (Mail Box)

For priority check

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220 230 240 250 260 270 280
GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTKHTCPCPAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVD
|||||
GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTKHTCPCPAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVD
220 230 240 250 260 270 280
290 300 310 320 330 340 350 360
VSHEDPEVKFNWYVDGVEVHNATKPREQYNSTYRVVSVLTVLDHQLNGKEYKCKVSNKALPAPIEKTIS
|||||
VSHEDPEVKFNWYVDGVEVHNATKPREQYNSTYRVVSVLTVLDHQLNGKEYKCKVSNKALPAPIEKTIS
290 300 310 320 330 340 350 360
KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSGFFLYSK
|||||
KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSGFFLYSK
370 380 390 400 410 420 430
440 450 460 X
LTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK
|||||
LTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK
440 450 460 470

2. US-09-499-662-117 (1-470)
US-09-053-583-11 Sequence 117, Application US/09053583A

Sequence 117, Application US/09053583A

GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 117
LENGTH: 470
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed heavy
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 470 Optimized Score = 470 Significance = 3.00
Residue Identity = 100% Matches = 470 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
MGWSCILFLVATATGVHSGVQLVQSGAEVKKPGASVKYSCKASGTYFTSYWQWYKQAPGQGLEWMGEIDP
|||||
MGWSCILFLVATATGVHSGVQLVQSGAEVKKPGASVKYSCKASGTYFTSYWQWYKQAPGQGLEWMGEIDP
X 10 20 30 40 50 60 70

SDSYTNYNOKFKGKATLTVDSTSTAYMELSLRSEDATVYYCARNRDYSNNWYFDWMGEGTLVTYSSASTK
|||||
SDSYTNYNOKFKGKATLTVDSTSTAYMELSLRSEDATVYYCARNRDYSNNWYFDWMGEGTLVTYSSASTK
|||||

SDSYTNYNOKFKGKATLTVDSTSTAYMELSLRSEDATVYYCARNRDYSNNWYFDWMGEGTLVTYSSASTK
80 90 100 110 120 130 140
150 160 170 180 190 200 210
GPSVFLPLAPSSKTSGGTAAALGCLVDYFPPEVTVSNWSGALTSGVHTFPFAVLQSSGLYSLSSVTVPPSSSL
|||||
GPSVFLPLAPSSKTSGGTAAALGCLVDYFPPEVTVSNWSGALTSGVHTFPFAVLQSSGLYSLSSVTVPPSSSL
150 160 170 180 190 200 210
220 230 240 250 260 270 280
GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTKHTCPCPAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVD
|||||
GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTKHTCPCPAPPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVD
220 230 240 250 260 270 280
VSHEDPEVKFNWYVDGVEVHNATKPREQYNSTYRVVSVLTVLDHQLNGKEYKCKVSNKALPAPIEKTIS
|||||
VSHEDPEVKFNWYVDGVEVHNATKPREQYNSTYRVVSVLTVLDHQLNGKEYKCKVSNKALPAPIEKTIS
290 300 310 320 330 340 350 360
KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSGFFLYSK
|||||
KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSGFFLYSK
370 380 390 400 410 420 430
440 450 460 X
LTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK
|||||
LTVDKSRWQGNVFCSCVMHEALHNHYTQKSLSLSPGK
440 450 460 470

3. US-09-499-662-117 (1-470)
US-09-408-646-14 Sequence 147, Application US/09408646A

Sequence 147, Application US/09408646A

GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 147
LENGTH: 470
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed heavy
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 470 Optimized Score = 470 Significance = 3.00
Residue Identity = 99% Matches = 468 Mismatches = 1
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
MGWSCILFLVATATGVHSGVQLVQSGAEVKKPGASVKYSCKASGTYFTSYWQWYKQAPGQGLEWMGEIDP
|||||
MGWSCILFLVATATGVHSGVQLVQSGAEVKKPGASVKYSCKASGTYFTSYWQWYKQAPGQGLEWMGEIDP
X 10 20 30 40 50 60 70

SDSYTNYNOKFKGKATLTVDSTSTAYMELSLRSEDATVYYCARNRDYSNNWYFDWMGEGTLVTYSSASTK
|||||
SDSYTNYNOKFKGKATLTVDSTSTAYMELSLRSEDATVYYCARNRDYSNNWYFDWMGEGTLVTYSSASTK
|||||

GPSVFPLAPSSKSTSGGTAAGCLGVKDYFPPEPVTVSNWNGALTSKVHFFPAVLQSSGLYSLSSVTVVPSSSL
 150 160 170 180 190 200 210
 150 160 170 180 190 200 210
 GPSVFPLAPSSKSTSGGTAAGCLGVKDYFPPEPVTVSNWNGALTSKVHFFPAVLQSSGLYSLSSVTVVPSSSL
 150 160 170 180 190 200 210

220 230 240 250 260 270 280
 GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTHTCPCPAPPELLGGPSVFLPPKPKDPTLMISRTPDEVTCVVVD
 220 230 240 250 260 270 280
 GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTHTCPCPAPPELLGGPSVFLPPKPKDPTLMISRTPDEVTCVVVD
 220 230 240 250 260 270 280

290 300 310 320 330 340 350 360
 VSHEDPEVKFNWYDGVGEVHNATKPREQYNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPTEKTIIS
 290 300 310 320 330 340 350 360
 VSHEDPEVKFNWYDGVGEVHNATKPREQYNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPTEKTIIS
 290 300 310 320 330 340 350 360

370 380 390 400 410 420 430
 KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSK
 370 380 390 400 410 420 430
 KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSK
 370 380 390 400 410 420 430

440 450 460 X
 LTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK
 440 450 460 470
 LTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK
 440 450 460 470

6. US-09-499-662-117 (1-470)

US-09-408-646-89 Sequence 89, Application US/09408646A

Sequence 89, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

EARLIER FILING DATE: 1999-09-30

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 89

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 469 Optimized Score = 469 Significance = 3.00
 Residue Identity = 9% Matches = 468 Mismatches = 2
 Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
 MGWSCILFLVATATGVHSGVQLVQSGAEVKKPKGASVKVSKASGYTFTSYNMQWVKQAPGQGLEWGEIDP
 100 110 120 130 140
 MGWSCILFLVATATGVHSGVQLVQSGAEVKKPKGASVKVSKASGYTFTSYNMQWVKQAPGQGLEWGEIDP
 X 10 20 30 40 50 60 70

SDSYTNNQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNNYFDVWGEGTLVTVSSASTK
 80 90 100 110 120 130 140
 SDSYTNNQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNNYFDVWGEGTLVTVSSASTK
 80 90 100 110 120 130 140

150 160 170 180 190 200 210
 150 160 170 180 190 200 210

GPSVFPLAPSSKSTSGGTAAGCLGVKDYFPPEPVTVSNWNGALTSKVHFFPAVLQSSGLYSLSSVTVVPSSSL
 150 160 170 180 190 200 210
 150 160 170 180 190 200 210
 GPSVFPLAPSSKSTSGGTAAGCLGVKDYFPPEPVTVSNWNGALTSKVHFFPAVLQSSGLYSLSSVTVVPSSSL
 150 160 170 180 190 200 210

220 230 240 250 260 270 280
 GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTHTCPCPAPPELLGGPSVFLPPKPKDPTLMISRTPDEVTCVVVD
 220 230 240 250 260 270 280
 GTQTYICNVNHNKPSNTKVDKRVKPKSCDKTHTCPCPAPPELLGGPSVFLPPKPKDPTLMISRTPDEVTCVVVD
 220 230 240 250 260 270 280

290 300 310 320 330 340 350 360
 VSHEDPEVKFNWYDGVGEVHNATKPREQYNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPTEKTIIS
 290 300 310 320 330 340 350 360
 VSHEDPEVKFNWYDGVGEVHNATKPREQYNSTYRVSVLTVLHQLDNLNGKEYCKVSNKALPAPTEKTIIS
 290 300 310 320 330 340 350 360

370 380 390 400 410 420 430
 KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSK
 370 380 390 400 410 420 430
 KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSK
 370 380 390 400 410 420 430

440 450 460 X
 LTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK
 440 450 460 470
 LTVDKSRWQGNVFCSCVMHEALHNHYTKQSLSPGK
 440 450 460 470

7. US-09-499-662-117 (1-470)

US-09-053-583-89 Sequence 89, Application US/09053583A

Sequence 89, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraiishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

EARLIER FILING DATE: 1998-04-01

EARLIER FILING DATE: 1997-04-01

EARLIER FILING DATE: 1997-04-01

EARLIER FILING DATE: 1997-06-25

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 89

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 469 Optimized Score = 469 Significance = 3.00
 Residue Identity = 9% Matches = 468 Mismatches = 2
 Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
 MGWSCILFLVATATGVHSGVQLVQSGAEVKKPKGASVKVSKASGYTFTSYNMQWVKQAPGQGLEWGEIDP
 100 110 120 130 140
 MGWSCILFLVATATGVHSGVQLVQSGAEVKKPKGASVKVSKASGYTFTSYNMQWVKQAPGQGLEWGEIDP
 X 10 20 30 40 50 60 70


```
80      90      100      110      120      130      140
SDSYNINQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNWYFDVWEGTLVTVSSASTK
|||||
SDSYNINQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNWYFDVWEGTLVTVSSASTK
80      90      100      110      120      130      140

150      160      170      180      190      200      210
GPSVFLPAPSSKSTGGTAALGCLVKDYFPEPTVYVSNWNGALTSVHTFPVAVLQSSGLYSLSSVTVPPSSSL
|||||
GPSVFLPAPSSKSTGGTAALGCLVKDYFPEPTVYVSNWNGALTSVHTFPVAVLQSSGLYSLSSVTVPPSSSL
150      160      170      180      190      200      210

220      230      240      250      260      270      280
GTQTYICNVNHPKSNKVDKRVPEKSCDKTHCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
|||||
GTQTYICNVNHPKSNKVDKRVPEKSCDKTHCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220      230      240      250      260      270      280

290      300      310      320      330      340      350      360
VSHEDPEVKFNMYVDGVEVHNKAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
|||||
VSHEDPEVKFNMYVDGVEVHNKAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
290      300      310      320      330      340      350      360

370      380      390      400      410      420      430
KAKGPREQVYTLPPSREEMTKNOVSLTCLVKGYFSPDIAVWESNGOPENNYKTTTPVLDSDGSFFLYSK
|||||
KAKGPREQVYTLPPSREEMTKNOVSLTCLVKGYFSPDIAVWESNGOPENNYKTTTPVLDSDGSFFLYSK
370      380      390      400      410      420      430

440      450      460      X
LTVDKSRWQOGNVFSCSVNHEALHNYTKQSLSPGK
|||||
LTVDKSRWQOGNVFSCSVNHEALHNYTKQSLSPGK
440      450      460      470

8. US-09-499-662-117 (1-470)
US-09-408-646-15 Sequence 157, Application US/09408646A

Sequence 157, Application US/09408646A
GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 157
LENGTH: 470
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed
OTHER INFORMATION: heavy chain of humanized anti-Fas antibody

Initial Score = 468 Optimized Score = 468 Significance = 2.99
Residue Identity = 98% Matches = 465 Mismatches = 3
Gaps = 0 Conservative Substitutions = 2

X      10      20      30      40      50      60      70
MGWSCIIILFLVATATGVSQVGVSGAEVKKPGASVKVSCKASGYTFSTYWMQVWVQAPGGLEWMGEIDP
|||||
MGWSCIIILFLVATATGVSQVGVSGAEVKKPGASVKVSCKASGYTFSTYWMQVWVQAPGGLEWMGEIDP
X      10      20      30      40      50      60      70
```

```
80      90      100      110      120      130      140
SDSYNINQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNWYFDVWEGTLVTVSSASTK
|||||
SDSYNINQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNWYFDVWEGTLVTVSSASTK
80      90      100      110      120      130      140

150      160      170      180      190      200      210
GPSVFLPAPSSKSTGGTAALGCLVKDYFPEPTVYVSNWNGALTSVHTFPVAVLQSSGLYSLSSVTVPPSSSL
|||||
GPSVFLPAPSSKSTGGTAALGCLVKDYFPEPTVYVSNWNGALTSVHTFPVAVLQSSGLYSLSSVTVPPSSSL
150      160      170      180      190      200      210

220      230      240      250      260      270      280
GTQTYICNVNHPKSNKVDKRVPEKSCDKTHCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
|||||
GTQTYICNVNHPKSNKVDKRVPEKSCDKTHCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220      230      240      250      260      270      280

290      300      310      320      330      340      350      360
VSHEDPEVKFNMYVDGVEVHNKAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
|||||
VSHEDPEVKFNMYVDGVEVHNKAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
290      300      310      320      330      340      350      360

370      380      390      400      410      420      430
KAKGPREQVYTLPPSREEMTKNOVSLTCLVKGYFSPDIAVWESNGOPENNYKTTTPVLDSDGSFFLYSK
|||||
KAKGPREQVYTLPPSREEMTKNOVSLTCLVKGYFSPDIAVWESNGOPENNYKTTTPVLDSDGSFFLYSK
370      380      390      400      410      420      430

440      450      460      X
LTVDKSRWQOGNVFSCSVNHEALHNYTKQSLSPGK
|||||
LTVDKSRWQOGNVFSCSVNHEALHNYTKQSLSPGK
440      450      460      470

9. US-09-499-662-117 (1-470)
US-09-408-646-9 Sequence 9, Application US/09408646A

Sequence 9, Application US/09408646A
GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 9
LENGTH: 464
TYPE: PRT
ORGANISM: Mus musculus

Initial Score = 230 Optimized Score = 411 Significance = 1.25
Residue Identity = 70% Matches = 332 Mismatches = 107
Gaps = 6 Conservative Substitutions = 25

X      10      20      30      40      50      60      70
MGWSCIIILFLVATATGVSQVGVSGAEVKKPGASVKVSCKASGYTFSTYWMQVWVQAPGGLEWMGEIDP
|||||
MGWSCIIILFLVATATGVSQVGVSGAEVKKPGASVKVSCKASGYTFSTYWMQVWVQAPGGLEWMGEIDP
X      10      20      30      40      50      60      70

SDSYNINQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNWYFDVWEGTLVTVSSASTK
|||||
SDSYNINQKFKGKATLTVDTSSTAYMELSLRSEDYAVYICARNRDYNNWYFDVWEGTLVTVSSASTK
80      90      100      110      120      130      140
```


GENERAL INFORMATION:
 APPLICANT: Serizawa, Nobufusa
 APPLICANT: Haruyama, Hideyuki
 APPLICANT: Nakahara, Kaori
 APPLICANT: Tamaki, Ikuko

LENGTH: 238

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody
Initial Score = 237 Optimized Score = 237 Significance = 2.24
Residue Identity = 98% Matches = 235 Mismatches = 1
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWLLVPGSGTGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDYMNWYQOKPGQAPRLII
|||||
METDTILLWLLVPGSGTGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDYMNWYQOKPGQAPRLII
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLGSGIPDRFSGSGGTDTLTISRLEPEDFAVYCCQSNEDPRTFGGQTKLEIKRTVAAPSVFIIPP
|||||
YAASNLGSGIPDRFSGSGGTDTLTISRLEPEDFAVYCCQSNEDPRTFGGQTKLEIKRTVAAPSVFIIPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFPYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVVCLLNNFPYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

5. US-09-499-662-107 (1-238)
US-09-408-646-10 Sequence 109, Application US/09408646A

Sequence 109, Application US/09408646A
GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 109
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 97% Matches = 232 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWLLVPGSGTGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDYMNWYQOKPGQAPRLII
|||||
METDTILLWLLVPGSGTGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDYMNWYQOKPGQAPRLII
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLGSGIPDRFSGSGGTDTLTISRLEPEDFAVYCCQSNEDPRTFGGQTKLEIKRTVAAPSVFIIPP
|||||

80 90 100 110 120 130 140
YAASNLGSGIPDRFSGSGGTDTLTISRLEPEDFAVYCCQSNEDPRTFGGQTKLEIKRTVAAPSVFIIPP
150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFPYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVVCLLNNFPYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

6. US-09-499-662-107 (1-238)
US-09-408-646-52 Sequence 52, Application US/09408646A

Sequence 52, Application US/09408646A
GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 52
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 96% Matches = 230 Mismatches = 6
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWLLVPGSGTGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDYMNWYQOKPGQAPRLII
|||||
METDTILLWLLVPGSGTGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDYMNWYQOKPGQAPRLII
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLGSGIPDRFSGSGGTDTLTISRLEPEDFAVYCCQSNEDPRTFGGQTKLEIKRTVAAPSVFIIPP
|||||
YAASNLGSGIPDRFSGSGGTDTLTISRLEPEDFAVYCCQSNEDPRTFGGQTKLEIKRTVAAPSVFIIPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFPYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVVCLLNNFPYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

7. US-09-499-662-107 (1-238)
US-09-053-583-10 Sequence 109, Application US/09053583A

Sequence 109, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio
APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

EARLIER FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 97% Matches = 232 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLVLLWVPGSGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
|||||
METDTILLVLLWVPGSGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTISRLEPEDFAVYYCQSQSDYDGDSDSYNNYQOKPGQAPRLLI
|||||
YAASNLESGIPDRFSGSGGTDTLTISRLEPEDFAVYYCQSQSDYDGDSDSYNNYQOKPGQAPRLLI
X 80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDQLKSGTASVYVCLLNFPYPRKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKKHVY
SDQLKSGTASVYVCLLNFPYPRKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKKHVY
X 150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
X 220 230

8. US-09-499-662-107 (1-238)

US-09-053-583-52 Sequence 52, Application US/09053583A

Sequence 52, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

EARLIER FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 52

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 96% Matches = 230 Mismatches = 6
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLVLLWVPGSGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
|||||
METDTILLVLLWVPGSGEIVLTQSPGTLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTISRLEPEDFAVYYCQSQSDYDGDSDSYNNYQOKPGQAPRLLI
|||||
YAASNLESGIPDRFSGSGGTDTLTISRLEPEDFAVYYCQSQSDYDGDSDSYNNYQOKPGQAPRLLI
X 80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDQLKSGTASVYVCLLNFPYPRKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKKHVY
SDQLKSGTASVYVCLLNFPYPRKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKKHVY
X 150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
X 220 230

9. US-09-499-662-107 (1-238)

US-09-408-646-12 Sequence 129, Application US/09408646A

Sequence 129, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

EARLIER FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 129

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

2. US-09-499-662-50 (1-238)
US-09-053-583-50 Sequence 50, Application US/09053583A

Sequence 50, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio
APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 50

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.25
Residue Identity = 100% Matches = 238 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTLLWVLLWVPGSGDVLVTQSPGTLSPGERATLSCKASQSDYDGDSDYMNWYQKPGQAPRLII
|||||
METDTLLWVLLWVPGSGDVLVTQSPGTLSPGERATLSCKASQSDYDGDSDYMNWYQKPGQAPRLII
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTISRLEPADFAVYYCQSQSDYDGDSDYMNWYQKPGQAPRLII
|||||
YAASNLESGIPDRFSGSGGTDTLTISRLEPADFAVYYCQSQSDYDGDSDYMNWYQKPGQAPRLII
X 80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNPNYPREKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVYVCLLNPNYPREKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

3. US-09-499-662-50 (1-238)
US-09-408-646-10 Sequence 107, Application US/09408646A

Sequence 107, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuro

APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 107
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.24
Residue Identity = 98% Matches = 235 Mismatches = 1
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTLLWVLLWVPGSGDVLVTQSPGTLSPGERATLSCKASQSDYDGDSDYMNWYQKPGQAPRLII
|||||
METDTLLWVLLWVPGSGDVLVTQSPGTLSPGERATLSCKASQSDYDGDSDYMNWYQKPGQAPRLII
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTISRLEPADFAVYYCQSQSDYDGDSDYMNWYQKPGQAPRLII
|||||
YAASNLESGIPDRFSGSGGTDTLTISRLEPADFAVYYCQSQSDYDGDSDYMNWYQKPGQAPRLII
X 80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNPNYPREKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVYVCLLNPNYPREKQVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

4. US-09-499-662-50 (1-238)
US-09-053-583-10 Sequence 107, Application US/09053583A

Sequence 107, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio
APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 107

LENGTH: 238

```

YAASNLESGIDPRFSGSGSDFTLTIHPVEEEDAATYVCOQSNEDPRTFGQGTKLEIKRTVAAPSVFIFFP
      80       90       100       110       120       130       140
150    160    170    180    190    200    210
SDEOLKSGTASVVCLLNFPYAKVOMKYVDNALQSNOSVESYTEDSKDSTVSLSSGTLTLSKADYEKKHYI
|||||
SDEOLKSGTASVVCLLNFPYAKVOMKYVDNALQSNOSVESYTEDSKDSTVSLSSGTLTLSKADYEKKHYI
150    160    170    180    190    200    210
220    230          X
ACEVTHOGLSPVTKSFNRGEC
|||||
ACEVTHOGLSPVTKSFNRGEC
220    230          X

6. US-09-499-662-50 (1-238)
   US-09-408-646-54 Sequence 54, Application US/09408646A

Sequence 54, Application US/09408646A
GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: Jp 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 54
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence

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FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 96% Matches = 229 Mismatches = 8
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
METDTILLWLLLVPGSTGDIVLTQSPGTLISLSPGERATLSCCKASQSDVDYDGDSDYNNWYQOKPGQAPRLLI
METDTILLWLLLVPGSTGDIVLTQSPGTLISLSPGERATLSCCKASQSDVDYDGDSDYNNWYQOKPGQAPRLLI
X 10 20 30 40 50 60 70
YAAASLGGIPDRFSGSGSGTDFTLTISRLEPADFAVYYCQSNEDPRTFGQGRLEIKRTVAAPSVFIFPP
YAAASLGGIPDRFSGSGSGTDFTLTIPHEEDDAAIYICQSNEDPRTFGQGRLEIKRTVAAPSVFIFPP
X 80 90 100 110 120 130 140
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSNQSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSNQSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
X 150 160 170 180 190 200 210
ACEVTHQGLSSPVTKSFNRGEC
ACEVTHQGLSSPVTKSFNRGEC
X 220 230
ACEVTHQGLSSPVTKSFNRGEC
ACEVTHQGLSSPVTKSFNRGEC
X 220 230

```

EARLIER FILING DATE: 1997-06-25

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 96% Matches = 229 Mismatches = 8
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
METDTILLWVLLWPGSGTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI
|||||
METDTILLWVLLWPGSGTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTISLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI
|||||
YAASNLESGIPDRFSGSGGTDTLTIHVPEEEDAATYCCQSNEDPRTFGGTGLEIKRTVAAPSVFIIPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

10. US-09-499-662-50 (1-238)
US-09-053-583-52 Sequence 52, Application US/09053583A

Sequence 52, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 52
LENGTH: 238
TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 97% Matches = 231 Mismatches = 7
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWVLLWPGSGTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI
|||||
METDTILLWVLLWPGSGTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI
METDTILLWVLLWPGSGTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI

X 10 20 30 40 50 60 70
80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTISLSPGERATLSCSKASQSDYDGDSDYMMNYQOKPGQAPRLLI
|||||
YAASNLESGIPDRFSGSGGTDTLTIHVPEEEDAATYCCQSNEDPRTFGGTGLEIKRTVAAPSVFIIPP
80 90 100 110 120 130 140
150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210
220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

2. US-09-499-662-52 (1-238)
US-09-053-583-52 Sequence 52, Application US/09053583A

Sequence 52, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraiishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053.583A

EARLIER FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 52

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 2.24
Residue Identity = 100% Matches = 0
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSTGDIVLTQSPGTLSLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
|||||
METDTILLWVLLWVPGSTGDIVLTQSPGTLSLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
|||||
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNFPYKQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVYVCLLNFPYKQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

3. US-09-499-662-52 (1-238)
US-09-408-646-10 Sequence 109, Application US/09408646A

Sequence 109, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakanara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408.646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 2.24
Residue Identity = 99% Matches = 236 Mismatches = 0
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSTGDIVLTQSPGTLSLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
|||||
METDTILLWVLLWVPGSTGDIVLTQSPGTLSLSPGERATLSCASQSDYDGDSDSYNNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
|||||
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNFPYKQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVYVCLLNFPYKQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

4. US-09-499-662-52 (1-238)
US-09-053-583-10 Sequence 109, Application US/09053583A

Sequence 109, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraiishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053.583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.24
Residue Identity = 99% Matches = 236 Mismatches = 0
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDVDYDGDSDYMMWYQOKPGQAPRLLI
METDTILLWVLLWVPGSTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDVDYDGDSDYMMWYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

YASNLESGIDPRFSGSGSGDFTLTIIHPVEEEDAATYYCOQSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
YASNLESGIDPRFSGSGSGDFTLTIIHPVEEEDAATYYCOQSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
X 80 90 100 110 120 130 140

SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
X 150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
ACEVTHQGLSSPVTKSFNRGEC
X 220 230

5. US-09-499-662-52 (1-238)

US-09-053-583-54 Sequence 54, Application US/09053583A

Sequence 54, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohtsuki, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 54

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.24
Residue Identity = 99% Matches = 236 Mismatches = 1
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDVDYDGDSDYMMWYQOKPGQAPRLLI
METDTILLWVLLWVPGSTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDVDYDGDSDYMMWYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

YASNLESGIDPRFSGSGSGDFTLTIIHPVEEEDAATYYCOQSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
YASNLESGIDPRFSGSGSGDFTLTIIHPVEEEDAATYYCOQSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
X 80 90 100 110 120 130 140

SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
X 150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
ACEVTHQGLSSPVTKSFNRGEC
X 220 230

6. US-09-499-662-52 (1-238)

US-09-408-646-54 Sequence 54, Application US/09408646A

Sequence 54, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 54

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.24
Residue Identity = 99% Matches = 236 Mismatches = 1
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDVDYDGDSDYMMWYQOKPGQAPRLLI
METDTILLWVLLWVPGSTGDIVLTQSPGTTLSLSPGERATLSCSKASQSDVDYDGDSDYMMWYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

YASNLESGIDPRFSGSGSGDFTLTIIHPVEEEDAATYYCOQSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
YASNLESGIDPRFSGSGSGDFTLTIIHPVEEEDAATYYCOQSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
X 80 90 100 110 120 130 140

SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
X 150 160 170 180 190 200 210

SDQLKSGTASVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDQLKSGTASVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

7. US-09-499-662-52 (1-238)
US-09-408-646-10 Sequence 107, Application US/09408646A

Sequence 107, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408.646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 107

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.19
Residue Identity = 96% Matches = 230 Mismatches = 6
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWLLWPGSTGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGQAPRLLI
|||||
METDTILLWLLWPGSTGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDATYYCQSNEDPRTFGGTRLEIKRTVAAPSVFIFPP
|||||
YAASNLESGIPDRFSGSGGTFTLTITISRLEPDAFVYCCQSNEDPRTFGGTRLEIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

8. US-09-499-662-52 (1-238)
US-09-408-646-50 Sequence 50, Application US/09408646A

Sequence 50, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408.646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 50

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.19
Residue Identity = 97% Matches = 231 Mismatches = 7
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWLLWPGSTGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGQAPRLLI
|||||
METDTILLWLLWPGSTGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDATYYCQSNEDPRTFGGTRLEIKRTVAAPSVFIFPP
|||||
YAASNLESGIPDRFSGSGGTFTLTITISRLEPDAFVYCCQSNEDPRTFGGTRLEIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

9. US-09-499-662-52 (1-238)
US-09-053-583-10 Sequence 107, Application US/09053583A

Sequence 107, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohtsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053.583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 107
LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial score = 234 Optimized Score = 234 Significance = 2.19
Residue Identity = 96% Matches = 230 Mismatches = 6
Gaps = 0 Conservative Substitutions = 2

X METDTILLWLLWPGSGDVLVTQSPGTLTSLSPGERATLSCKASQSDYDGDSDSYMNNYQOKPGQAPRLLI
|||||
METDTILLWLLWPGSGDVLVTQSPGTLTSLSPGERATLSCKASQSDYDGDSDSYMNNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YASNLESGIPDRFSGSGGTDTLTITIHVVEEDAATYYCQOSNEDPRTFGQGTREIKRTVAAPSVFIPPP
|||||
YASNLESGIPDRFSGSGGTDTLTITIRLEPDAFVYYCQOSNEDPRTFGQGTREIKRTVAAPSVFIPPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYEHKHY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYEHKHY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

10. US-09-499-662-52 (1-238)
US-09-053-583-50 Sequence 50, Application US/09053583A

Sequence 50, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 50
LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.19
Residue Identity = 97% Matches = 231 Mismatches = 7

Gaps = 0 Conservative Substitutions = 0

X METDTILLWLLWPGSGDVLVTQSPGTLTSLSPGERATLSCKASQSDYDGDSDSYMNNYQOKPGQAPRLLI
|||||
METDTILLWLLWPGSGDVLVTQSPGTLTSLSPGERATLSCKASQSDYDGDSDSYMNNYQOKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YASNLESGIPDRFSGSGGTDTLTITIHVVEEDAATYYCQOSNEDPRTFGQGTREIKRTVAAPSVFIPPP
|||||
YASNLESGIPDRFSGSGGTDTLTITIRLEPDAFVYYCQOSNEDPRTFGQGTREIKRTVAAPSVFIPPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYEHKHY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYEHKHY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

2. US-09-499-662-54 (1-238)
US-09-053-583-54 Sequence 54, Application US/09053583A

Sequence 54, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio
APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn ver. 2.0

SEQ ID NO 54

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.24
Residue Identity = 100% Matches = 238 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTLLWVLLWPGSGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGPPKLLI
|||||
METDTLLWVLLWPGSGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGPPKLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGTDFTLTTHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
YAASNLESGIPDRFSGSGTDFTLTTHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNFPYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVYVCLLNFPYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

3. US-09-499-662-54 (1-238)
US-09-408-646-10 Sequence 109, Application US/09408646A

Sequence 109, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.23
Residue Identity = 98% Matches = 234 Mismatches = 1
Gaps = 0 Conservative Substitutions = 3

X 10 20 30 40 50 60 70
METDTLLWVLLWPGSGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGPPKLLI
|||||
METDTLLWVLLWPGSGDIVLTQSPGTLSPGERATLSCASQSDYDGDSTYNNYQKPGPPKLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGTDFTLTTHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
YAASNLESGIPDRFSGSGTDFTLTTHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNFPYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
|||||
SDEQLKSGTASVYVCLLNFPYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYEKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

4. US-09-499-662-54 (1-238)
US-09-408-646-52 Sequence 52, Application US/09408646A

Sequence 52, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 52

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.23
Residue Identity = 99% Matches = 236 Mismatches = 1
Gaps = 0 Conservative Substitutions = 1

```
X      10      20      30      40      50      60      70
METDTILLWVLLWVPGSTGDIVLTQSPGTLSPGERATLSCKASQSDVDYDGDSDYMMNYQOKPQPKLLI
|||||
METDTILLWVLLWVPGSTGDIVLTQSPGTLSPGERATLSCKASQSDVDYDGDSDYMMNYQOKPQAPRLLI
X      10      20      30      40      50      60      70
80      90      100     110     120     130     140
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
|||||
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
80      90      100     110     120     130     140
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
150     160     170     180     190     200     210
220      230      X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220      230      X
```

5. US-09-499-662-54 (1-238)

US-09-053-583-10 Sequence 109, Application US/09053583A

Sequence 109, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

EARLIER FILING DATE: 1998-04-01

EARLIER FILING DATE: 1997-04-01

EARLIER FILING DATE: 1997-06-25

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.23

Residue Identity = 98% Matches = 234 Mismatches = 3

Gaps = 0 Conservative Substitutions = 1

```
X      10      20      30      40      50      60      70
METDTILLWVLLWVPGSTGDIVLTQSPGTLSPGERATLSCKASQSDVDYDGDSDYMMNYQOKPQPKLLI
|||||
METDTILLWVLLWVPGSTGDIVLTQSPGTLSPGERATLSCKASQSDVDYDGDSDYMMNYQOKPQAPRLLI
X      10      20      30      40      50      60      70
80      90      100     110     120     130     140
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
|||||
```

```
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
|||||
```

```
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
80      90      100     110     120     130     140
150     160     170     180     190     200     210
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
150     160     170     180     190     200     210
220      230      X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220      230      X
```

6. US-09-499-662-54 (1-238)

US-09-053-583-52 Sequence 52, Application US/09053583A

Sequence 52, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

EARLIER FILING DATE: 1998-04-01

EARLIER FILING DATE: 1997-04-01

EARLIER FILING DATE: 1997-06-25

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 52

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.23

Residue Identity = 99% Matches = 236 Mismatches = 1

Gaps = 0 Conservative Substitutions = 1

```
X      10      20      30      40      50      60      70
METDTILLWVLLWVPGSTGDIVLTQSPGTLSPGERATLSCKASQSDVDYDGDSDYMMNYQOKPQPKLLI
|||||
METDTILLWVLLWVPGSTGDIVLTQSPGTLSPGERATLSCKASQSDVDYDGDSDYMMNYQOKPQAPRLLI
X      10      20      30      40      50      60      70
80      90      100     110     120     130     140
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
|||||
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
80      90      100     110     120     130     140
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
150     160     170     180     190     200     210
220      230      X
```

```
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
|||||
YAASNLESGIPDRFSGSGGTDFTLTIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIIPP
80      90      100     110     120     130     140
150     160     170     180     190     200     210
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSSSTLTLSKADYERKHVY
150     160     170     180     190     200     210
220      230      X
```

ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

7. US-09-499-662-54 (1-238)
US-09-408-646-10 Sequence 107, Application US/09408646A

Sequence 107, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 107
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 95% Matches = 228 Mismatches = 7
Gaps = 0 Conservative Substitutions = 3

X 10 20 30 40 50 60 70
METDTILLVLLWVPGSTGDIVLTQSPGTLSPGGERATLSCASQSDYDGDSDYNNYQKPGQAPRLI
|||||
METDTILLVLLWVPGSTGDIVLTQSPGTLSPGGERATLSCASQSDYDGDSDYNNYQKPGQAPRLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
|||||
YAASNLESGIPDRFSGSGGTFTLTITISRLPEADFAVYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFYPREAKYQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKYQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

8. US-09-499-662-54 (1-238)
US-09-408-646-50 Sequence 50, Application US/09408646A

Sequence 50, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 50
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 96% Matches = 229 Mismatches = 8
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
METDTILLVLLWVPGSTGDIVLTQSPGTLSPGGERATLSCASQSDYDGDSDYNNYQKPGQAPRLI
|||||
METDTILLVLLWVPGSTGDIVLTQSPGTLSPGGERATLSCASQSDYDGDSDYNNYQKPGQAPRLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDAATYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
|||||
YAASNLESGIPDRFSGSGGTFTLTITISRLPEADFAVYYCQSNEDPRTFGQGTREIKRTVAAPSVFIFPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCLLNNFYPREAKYQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKYQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

9. US-09-499-662-54 (1-238)
US-09-053-583-10 Sequence 107, Application US/09053583A

Sequence 107, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohtsuki, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 107
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 95% Matches = 228 Mismatches = 7
Gaps = 0 Conservative Substitutions = 3

```
X      10      20      30      40      50      60      70
METDILLWLLWVPGSGTGLVLTQSGTSLSPGERATLSCKASQSDVDGDSYMNWYQKPGQPKLLI
|||||
METDILLWLLWVPGSGTGLVLTQSGTSLSPGERATLSCKASQSDVDGDSYMNWYQKPGQPKLLI
X      10      20      30      40      50      60      70
```

```
80      90      100      110      120      130      140
YAASNLESGIPDRFSGSGSGDTFTLTIIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIPPP
|||||
YAASNLESGIPDRFSGSGSGDTFTLTIIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIPPP
X      80      90      100      110      120      130      140
```

```
150      160      170      180      190      200      210
SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
X      150      160      170      180      190      200      210
```

```
220      230      X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
X      220      230      X
```

10. US-09-499-662-54 (1-238)
US-09-053-583-50 Sequence 50, Application US/09053583A

Sequence 50, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
EARLIER FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 50
LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.20
Residue Identity = 96% Matches = 229 Mismatches = 8
Gaps = 0 Conservative Substitutions = 1

```
X      10      20      30      40      50      60      70
METDILLWLLWVPGSGTGLVLTQSGTSLSPGERATLSCKASQSDVDGDSYMNWYQKPGQPKLLI
|||||
METDILLWLLWVPGSGTGLVLTQSGTSLSPGERATLSCKASQSDVDGDSYMNWYQKPGQPKLLI
X      10      20      30      40      50      60      70
```

```
X      10      20      30      40      50      60      70
80      90      100      110      120      130      140
YAASNLESGIPDRFSGSGSGDTFTLTIIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIPPP
|||||
YAASNLESGIPDRFSGSGSGDTFTLTIIHPVEEEDAATYYCQOSNEDPRTFGQGTLEIKRTVAAPSVFIPPP
X      80      90      100      110      120      130      140

150      160      170      180      190      200      210
SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYERHKVY
X      150      160      170      180      190      200      210

220      230      X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
X      220      230      X
```


> O <
O I O Intellegenetics
> O <

FastDB - Fast Pairwise Comparison of Sequences
Release 5.4

Results file us-09-499-662-109.res made by sdauid on Mon 22 Apr 102 16:32:22-PPT.

Query sequence being compared: US-09-499-662-109 (1-238)
Number of sequences searched: 87
Number of scores above cutoff: 87

Results of the initial comparison of US-09-499-662-109 (1-238) with:
File : yu662.pep

```

100-
-
N 10- *
E 5-
U 50-
M -
B -
E -
R -
O *
F 10- *
S -
E 5-
Q -
U -
E -
N -
C -
E -
S 0

```

Similarity matrix PAM-150 K-tuple 2
Threshold level of sim. 16%
Mismatch penalty 1 Joining penalty 20
Gap penalty 1.00 Window size 32
Gap size penalty 0.05
Cutoff score 0
Randomization group 0

SEARCH STATISTICS

Scores:	Mean	Median	Standard Deviation
	46	7	85.77

Times:

CPU	Total Elapsed
00:00:00.01	00:00:00.00

Number of residues: 9504
Number of sequences searched: 87
Number of scores above cutoff: 87

The scores below are sorted by initial score.

Significance is calculated based on initial score.

2 100% identical sequences to the query sequence were found:

Sequence Name	Description	Length	Init. Opt.	Score	Sig.	Frame
---------------	-------------	--------	------------	-------	------	-------

1. US-09-408-646-10 Sequence 109, Application 238 238 2.24 0
2. US-09-053-583-10 Sequence 109, Application 238 238 2.24 0

2 100% similar sequences to the query sequence were found:

Sequence Name	Description	Length	Init. Opt.	Score	Sig.	Frame
3. US-09-408-646-52 Sequence 52, Application	238	238	238	2.24	0	
4. US-09-053-583-52 Sequence 52, Application	238	238	238	2.24	0	

The list of other best scores is:

Sequence Name	Description	Length	Init. Opt.	Score	Sig.	Frame
**** 2 standard deviations above mean ****						
5. US-09-408-646-54 Sequence 54, Application	238	237	237	2.23	0	
6. US-09-053-583-54 Sequence 54, Application	238	237	237	2.23	0	
7. US-09-408-646-10 Sequence 107, Application	238	235	235	2.20	0	
8. US-09-053-583-10 Sequence 107, Application	238	235	235	2.20	0	
9. US-09-408-646-50 Sequence 50, Application	238	234	234	2.19	0	
10. US-09-053-583-50 Sequence 50, Application	238	234	234	2.19	0	

1. US-09-499-662-109 (1-238)
- US-09-408-646-10 Sequence 109, Application US/09408646A

Sequence 109, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990340/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.24
Residue Identity = 100% Matches = 238 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

X	10	20	30	40	50	60	70
METD	ILLW	LLWV	PGST	GEIV	LTQSP	GTLS	SPGER
ATL	SLSP	GERAT	ISCK	ASQSV	YDYG	DSYMM	YQKPGQAP
RLLI							
METD	ILLW	LLWV	PGST	GEIV	LTQSP	GTLS	SPGER
ATL	SLSP	GERAT	ISCK	ASQSV	YDYG	DSYMM	YQKPGQAP
RLLI							

80	90	100	110	120	130	140
YAAS	NLES	GIPDR	FSGSG	SGTDF	TLTI	HPVEE
DAAT	YCCQ	SNDP	RTFG	OGTK	LEIK	RTVA
APSV	FI	FP				
YAAS	NLES	GIPDR	FSGSG	SGTDF	TLTI	HPVEE
DAAT	YCCQ	SNDP	RTFG	OGTK	LEIK	RTVA
APSV	FI	FP				

150	160	170	180	190	200	210
SDEQ	LSGT	ASV	YVCL	NNFY	PRAK	VQK
VDNAL	QSGNS	QESV	TEQD	SKDS	YSL	STLS
KADY	EKHV	Y				
SDEQ	LSGT	ASV	YVCL	NNFY	PRAK	VQK
VDNAL	QSGNS	QESV	TEQD	SKDS	YSL	STLS
KADY	EKHV	Y				

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

2. US-09-499-662-109 (1-238)
US-09-053-583-10 Sequence 109, Application US/09053583A

Sequence 109, Application US/09053583A

GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 109

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 2.24
Residue Identity = 100% Matches = 238 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWVLLWPGSTGEIVLTQSPGTLSPGERATLSCKASQSYVDYDGDSDYNNYQKPGQAPRLLI
|||||
METDTILLWVLLWPGSTGEIVLTQSPGTLSPGERATLSCKASQSYVDYDGDSDYNNYQKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
|||||
YAASNLESGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYERHKVY
|||||
SDEQLKSGTASVYVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYERHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

3. US-09-499-662-109 (1-238)
US-09-408-646-52 Sequence 52, Application US/09408646A

Sequence 52, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 52
LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 2.24
Residue Identity = 99% Matches = 236 Mismatches = 0
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWVLLWPGSTGEIVLTQSPGTLSPGERATLSCKASQSYVDYDGDSDYNNYQKPGQAPRLLI
|||||
METDTILLWVLLWPGSTGEIVLTQSPGTLSPGERATLSCKASQSYVDYDGDSDYNNYQKPGQAPRLLI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
|||||
YAASNLESGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVYVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYERHKVY
|||||
SDEQLKSGTASVYVCLLNFPYPRKAVQWVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYERHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

4. US-09-499-662-109 (1-238)
US-09-053-583-52 Sequence 52, Application US/09053583A

Sequence 52, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 52
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence

FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 238 Optimized Score = 238 Significance = 2.24
Residue Identity = 99% Matches = 236 Mismatches = 0
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
|||||
METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTIIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
|||||
YAASNLESGIPDRFSGSGGTDTLTIIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCCLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYEHKVY
|||||
SDEQLKSGTASVVCCLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYEHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

5. US-09-499-662-109 (1-238)
US-09-408-646-54 Sequence 54, Application US/09408646A

Sequence 54, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuo

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 54

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.23
Residue Identity = 98% Matches = 234 Mismatches = 1
Gaps = 0 Conservative Substitutions = 3

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
|||||
METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
X 10 20 30 40 50 60 70

METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
X 10 20 30 40 50 60 70
80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTIIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
|||||
YAASNLESGIPDRFSGSGGTDTLTIIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCCLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYEHKVY
|||||
SDEQLKSGTASVVCCLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYEHKVY
150 160 170 180 190 200 210

220 230 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

6. US-09-499-662-109 (1-238)
US-09-053-583-54 Sequence 54, Application US/09053583A

Sequence 54, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsami, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraiishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 54

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 237 Optimized Score = 237 Significance = 2.23
Residue Identity = 98% Matches = 234 Mismatches = 1
Gaps = 0 Conservative Substitutions = 3

X 10 20 30 40 50 60 70
METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
|||||
METDTILLWVLLWVPGSGTGTTLTIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
X 10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTDTLTIIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
|||||
YAASNLESGIPDRFSGSGGTDTLTIIHPVEEEDAATYCCQSNEDPRTFGOGTKLEIKRTVAAPSVFI
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDEQLKSGTASVVCCLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYEHKVY
|||||
SDEQLKSGTASVVCCLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSLTLSKADYEHKVY
150 160 170 180 190 200 210

SDQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

7. US-09-499-662-109 (1-238)
US-09-408-646-10 Sequence 107, Application US/09408646A

Sequence 107, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 107

LENGTH: 238

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 235 Optimized Score = 2.20
Residue Identity = 97% Matches = 232 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWLLWPGSGEIVLTQSPGTLSPGERATLSCAKSQSYVDYDGDSTYMNYYQKPGQAPRLLI
|||||
METDTILLWLLWPGSGEIVLTQSPGTLSPGERATLSCAKSQSYVDYDGDSTYMNYYQKPGQAPRLLI
10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDAATYYCQSQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
|||||
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDAATYYCQSQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

8. US-09-499-662-109 (1-238)
US-09-053-583-10 Sequence 107, Application US/09053583A

Sequence 107, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraiishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 107
LENGTH: 238
TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed light

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 235 Optimized Score = 2.20
Residue Identity = 97% Matches = 232 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
METDTILLWLLWPGSGEIVLTQSPGTLSPGERATLSCAKSQSYVDYDGDSTYMNYYQKPGQAPRLLI
|||||
METDTILLWLLWPGSGEIVLTQSPGTLSPGERATLSCAKSQSYVDYDGDSTYMNYYQKPGQAPRLLI
10 20 30 40 50 60 70

80 90 100 110 120 130 140
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDAATYYCQSQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
|||||
YAASNLESGIPDRFSGSGGTFTLTITHPVEEEDAATYYCQSQSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
80 90 100 110 120 130 140

150 160 170 180 190 200 210
SDQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
|||||
SDQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYSLSTLTLSKADYKHKVY
150 160 170 180 190 200 210

220 X
ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 X

9. US-09-499-662-109 (1-238)
US-09-408-646-50 Sequence 50, Application US/09408646A

Sequence 50, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 50
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.19
Residue Identity = 96% Matches = 229 Mismatches = 7
Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWLLWPGSTGEIVLTQSPGTLSPGERATLSCSKASQSYVDYDGDSDSYMNYQKPGQAPRLII
|||||
METDTILLWLLWPGSTGEIVLTQSPGTLSPGERATLSCSKASQSYVDYDGDSDSYMNYQKPGQAPRLII
X 10 20 30 40 50 60 70

YASNLESIGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQOSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
|||||
YASNLESIGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQOSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
80 90 100 110 120 130 140

SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYERHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYERHKVY
150 160 170 180 190 200 210

ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

10. US-09-499-662-109 (1-238)
US-09-053-583-50 Sequence 50, Application US/09053583A

Sequence 50, Application US/09053583A
GENERAL INFORMATION:
APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin
TITLE OF INVENTION: Anti-Fas Antibodies
FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
EARLIER FILING DATE: 1998-04-01
EARLIER FILING DATE: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID N) 50
LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designed light
OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 234 Optimized Score = 234 Significance = 2.19
Residue Identity = 96% Matches = 229 Mismatches = 7

Gaps = 0 Conservative Substitutions = 2

X 10 20 30 40 50 60 70
METDTILLWLLWPGSTGEIVLTQSPGTLSPGERATLSCSKASQSYVDYDGDSDSYMNYQKPGQAPRLII
|||||
METDTILLWLLWPGSTGEIVLTQSPGTLSPGERATLSCSKASQSYVDYDGDSDSYMNYQKPGQAPRLII
X 10 20 30 40 50 60 70

YASNLESIGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQOSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
|||||
YASNLESIGIPDRFSGSGGTFTLTTHPVEEEDAATYYCQOSNEDPRTFGGQTKLEIKRTVAAPSVFIAPP
80 90 100 110 120 130 140

SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYERHKVY
|||||
SDEQLKSGTASVVCLLNNFYPREAKVQKVDNALQSGNSQESVTEQDSKDSYSLSSITLTSKADYERHKVY
150 160 170 180 190 200 210

ACEVTHQGLSSPVTKSFNRGEC
|||||
ACEVTHQGLSSPVTKSFNRGEC
220 230 X

290 300 310 320 330 340 350 360
VSHEDPEVKNWYVGVVHNATKPREQYNTYRVVSVLTVLHODWLNKKEYCKVSNKALPAPTEKTIS
|||||
VSHEDPEVKNWYVGVVHNATKPREQYNTYRVVSVLTVLHODWLNKKEYCKVSNKALPAPTEKTIS
290 300 310 320 330 340 350 360
KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
440 450 460 X
LTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPCK
|||||
LTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPCK
440 450 460 470

2. US-09-499-662-89 (1-470)
US-09-053-583-89 Sequence 89, Application US/09053583A

Sequence 89, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Ichikawa, Kimihisa
APPLICANT: Ohsumi, Jun
APPLICANT: Ohtsuki, Masahiko
APPLICANT: Haruyama, Hideyuki
APPLICANT: Takahashi, Tohru
APPLICANT: Yoshida, Hiroko
APPLICANT: Shiraishi, Akio
APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG
CURRENT APPLICATION NUMBER: US/09/053,583A
CURRENT FILING DATE: 1998-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-82953
EARLIER FILING DATE: 1997-04-01
EARLIER APPLICATION NUMBER: JP HEI 9-169088
EARLIER FILING DATE: 1997-06-25
EARLIER APPLICATION NUMBER: JP HEI 9-276064
EARLIER FILING DATE: 1997-10-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 89

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 470 Optimized Score = 470 Significance = 3.01
Residue Identity = 100% Matches = 470 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
MGWSCILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKRAGTFTSYNMQWVKQAPGQRLWGEIDP
|||||
MGWSCILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKRAGTFTSYNMQWVKQAPGQRLWGEIDP
X 10 20 30 40 50 60 70
SDSYTYNOKFKGKATLTVDTSASTAYMELSSLRSEDATVYICARNRDYSNNWYFDWVGEGTLVTYSSASTK
80 90 100 110 120 130 140

150 160 170 180 190 200 210
GPSVFPPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSL
|||||

GPSVFPPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSL
150 160 170 180 190 200 210
220 230 240 250 260 270 280
GTQTYICNVNHRKPSNTKVKRVPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
|||||
GTQTYICNVNHRKPSNTKVKRVPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
220 230 240 250 260 270 280
VSHEDPEVKNWYVGVVHNATKPREQYNTYRVVSVLTVLHODWLNKKEYCKVSNKALPAPTEKTIS
|||||
VSHEDPEVKNWYVGVVHNATKPREQYNTYRVVSVLTVLHODWLNKKEYCKVSNKALPAPTEKTIS
290 300 310 320 330 340 350 360
KAKQPREPOVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
440 450 460 X
LTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPCK
|||||
LTVDKSRWQGNVFCSCVMHEALHNHYTOKSLSPCK
440 450 460 470

3. US-09-499-662-89 (1-470)
US-09-408-646-14 Sequence 143, Application US/09408646A

Sequence 143, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
APPLICANT: Haruyama, Hideyuki
APPLICANT: Nakahara, Kaori
APPLICANT: Tamaki, Ikuko
APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG
CURRENT APPLICATION NUMBER: US/09/408,646A
CURRENT FILING DATE: 1999-09-30
EARLIER APPLICATION NUMBER: JP 10-276881
EARLIER FILING DATE: 1998-09-30
NUMBER OF SEQ ID NOS: 165
SEQ ID NO 143

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 469 Optimized Score = 469 Significance = 3.00
Residue Identity = 99% Matches = 467 Mismatches = 3
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
MGWSCILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKRAGTFTSYNMQWVKQAPGQRLWGEIDP
|||||
MGWSCILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKRAGTFTSYNMQWVKQAPGQRLWGEIDP
X 10 20 30 40 50 60 70
SDSYTYNOKFKGKATLTVDTSASTAYMELSSLRSEDATVYICARNRDYSNNWYFDWVGEGTLVTYSSASTK
80 90 100 110 120 130 140

150 160 170 180 190 200 210
GPSVFPPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSL
|||||

150 160 170 180 190 200 210
220 230 240 250 260 270 280
GTQYICNVNHPKPSNTKVDKREPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
GTQYICNVNHPKPSNTKVDKREPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
GTQYICNVNHPKPSNTKVDKREPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
KAKGPREQVYTLPPSREMTKNQVSLTCLVKGYFSPDIAVEWESNGOPENNYKTPPVLDSDGSFFLYSK
KAKGPREQVYTLPPSREMTKNQVSLTCLVKGYFSPDIAVEWESNGOPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
KAKGPREQVYTLPPSREMTKNQVSLTCLVKGYFSPDIAVEWESNGOPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
440 450 460 470
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
440 450 460 470
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
440 450 460 470

4. US-09-499-662-89 (1-470)
US-09-408-646-11 Sequence 117, Application US/09408646A

Sequence 117, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

CURRENT APPLICATION NUMBER: 990540/HG

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 117

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 469 Optimized Score = 469 Significance = 3.00

Residue Identity = 99% Matches = 468 Mismatches = 2

Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
MCWSCIIILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKASGYTFTSYMQWVKQAPGQRLWGMGIDP
MCWSCIIILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKASGYTFTSYMQWVKQAPGQRLWGMGIDP
X 10 20 30 40 50 60 70
SDSYNYNOKFKGKATLVTDTSASTAYMELSLRSEDVAVYCAARNRDYNNNYFDVWGEGLTVTVSSASTK
SDSYNYNOKFKGKATLVTDTSASTAYMELSLRSEDVAVYCAARNRDYNNNYFDVWGEGLTVTVSSASTK
80 90 100 110 120 130 140
SDSYNYNOKFKGKATLVTDTSASTAYMELSLRSEDVAVYCAARNRDYNNNYFDVWGEGLTVTVSSASTK
80 90 100 110 120 130 140
GSPVPLAPSSKSTGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSL
GSPVPLAPSSKSTGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSL
150 160 170 180 190 200 210
GSPVPLAPSSKSTGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSL
150 160 170 180 190 200 210

220 230 240 250 260 270 280
GTQYICNVNHPKPSNTKVDKREPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
GTQYICNVNHPKPSNTKVDKREPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
GTQYICNVNHPKPSNTKVDKREPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
VSHDEPEVKFNHYVDGVEVHNNAKTPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
KAKGPREQVYTLPPSREMTKNQVSLTCLVKGYFSPDIAVEWESNGOPENNYKTPPVLDSDGSFFLYSK
KAKGPREQVYTLPPSREMTKNQVSLTCLVKGYFSPDIAVEWESNGOPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
KAKGPREQVYTLPPSREMTKNQVSLTCLVKGYFSPDIAVEWESNGOPENNYKTPPVLDSDGSFFLYSK
370 380 390 400 410 420 430
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
440 450 460 470
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
440 450 460 470
LTVDKSRWQOGNVFSCSYMHAEALHNNHYTKSLSPGK
440 450 460 470

5. US-09-499-662-89 (1-470)
US-09-053-583-11 Sequence 117, Application US/09053583A

Sequence 117, Application US/09053583A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Ichikawa, Kimihisa

APPLICANT: Ohsumi, Jun

APPLICANT: Ohtsuki, Masahiko

APPLICANT: Haruyama, Hideyuki

APPLICANT: Takahashi, Tohru

APPLICANT: Yoshida, Hiroko

APPLICANT: Shiraiishi, Akio

APPLICANT: Yonehara, Shin

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 980126/HG

CURRENT APPLICATION NUMBER: US/09/053,583A

CURRENT FILING DATE: 1998-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-82953

EARLIER FILING DATE: 1997-04-01

EARLIER APPLICATION NUMBER: JP HEI 9-169088

EARLIER FILING DATE: 1997-06-25

EARLIER APPLICATION NUMBER: JP HEI 9-276064

EARLIER FILING DATE: 1997-10-08

NUMBER OF SEQ ID NOS: 123

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 117

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 469 Optimized Score = 469 Significance = 3.00

Residue Identity = 99% Matches = 468 Mismatches = 2

Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
MCWSCIIILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKASGYTFTSYMQWVKQAPGQRLWGMGIDP
MCWSCIIILFLVATATGVHSQVQLVQSGAEVKKPGASVKVSCKASGYTFTSYMQWVKQAPGQRLWGMGIDP
X 10 20 30 40 50 60 70
SDSYNYNOKFKGKATLVTDTSASTAYMELSLRSEDVAVYCAARNRDYNNNYFDVWGEGLTVTVSSASTK
SDSYNYNOKFKGKATLVTDTSASTAYMELSLRSEDVAVYCAARNRDYNNNYFDVWGEGLTVTVSSASTK
80 90 100 110 120 130 140
SDSYNYNOKFKGKATLVTDTSASTAYMELSLRSEDVAVYCAARNRDYNNNYFDVWGEGLTVTVSSASTK
80 90 100 110 120 130 140
GSPVPLAPSSKSTGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSL
GSPVPLAPSSKSTGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSL
150 160 170 180 190 200 210
GSPVPLAPSSKSTGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSL
150 160 170 180 190 200 210

SDSYTYNOKFKGKATLTVDTSSTAYMELSLRSEDYAVYYCARNRDYSNNWYFDVWGEGTLVTVSSASTK
80 90 100 110 120 130 140
150 160 170 180 190 200 210
GSPVFLPSSKSTSGTAAALGCLVDYFPEPVTVSWNSGALTSGVHTTFAVLQSSGLYSLSSVTVPPSSSL
150 160 170 180 190 200 210
GSPVFLPSSKSTSGTAAALGCLVDYFPEPVTVSWNSGALTSGVHTTFAVLQSSGLYSLSSVTVPPSSSL
150 160 170 180 190 200 210
220 230 240 250 260 270 280
GTQTYICNVNHPKSNKVDKRVKPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
GTQTYICNVNHPKSNKVDKRVKPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
290 300 310 320 330 340 350 360
VSHEDPEVFNNYVDGVEVHNNAKTPREEQYNSTYRVSVLTVLHODWLNKREYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
VSHEDPEVFNNYVDGVEVHNNAKTPREEQYNSTYRVSVLTVLHODWLNKREYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
KAKQPREQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSEFFLYSK
370 380 390 400 410 420 430
KAKQPREQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSEFFLYSK
370 380 390 400 410 420 430
440 450 460 X
LTVDKSRWQOGNVFSCSVNHEALHNNHYTKSLSPGK
440 450 460 470
LTVDKSRWQOGNVFSCSVNHEALHNNHYTKSLSPGK
440 450 460 470

6. US-09-499-662-89 (1-470)

US-09-408-646-14 Sequence 147, Application US/09408646A

Sequence 147, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 147

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 468 Optimized Score = 468 Significance = 2.99
Residue Identity = 99% Matches = 466 Mismatches = 3
Gaps = 0 Conservative Substitutions = 1

X 10 20 30 40 50 60 70
MGWSCILFLVATATGVHSQVQLVOSGAIEVKKPGASVKVSKASGVTFTSYNMQWVKQAPGORLEWGEIDP
150 160 170 180 190 200 210
MGWSCILFLVATATGVHSQVQLVOSGAIEVKKPGASVKVSKASGVTFTSYNMQWVKQAPGORLEWGEIDP
150 160 170 180 190 200 210
X 10 20 30 40 50 60 70

SDSYTYNOKFKGKATLTVDTSSTAYMELSLRSEDYAVYYCARNRDYSNNWYFDVWGEGTLVTVSSASTK
80 90 100 110 120 130 140
SDSYTYNOKFKGKATLTVDTSSTAYMELSLRSEDYAVYYCARNRDYSNNWYFDVWGEGTLVTVSSASTK
80 90 100 110 120 130 140

150 160 170 180 190 200 210
GSPVFLPSSKSTSGTAAALGCLVDYFPEPVTVSWNSGALTSGVHTTFAVLQSSGLYSLSSVTVPPSSSL
150 160 170 180 190 200 210
GSPVFLPSSKSTSGTAAALGCLVDYFPEPVTVSWNSGALTSGVHTTFAVLQSSGLYSLSSVTVPPSSSL
150 160 170 180 190 200 210
220 230 240 250 260 270 280
GTQTYICNVNHPKSNKVDKRVKPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
GTQTYICNVNHPKSNKVDKRVKPKSCDKTHTCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD
220 230 240 250 260 270 280
290 300 310 320 330 340 350 360
VSHEDPEVFNNYVDGVEVHNNAKTPREEQYNSTYRVSVLTVLHODWLNKREYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
VSHEDPEVFNNYVDGVEVHNNAKTPREEQYNSTYRVSVLTVLHODWLNKREYKCKVSNKALPAPIETIS
290 300 310 320 330 340 350 360
KAKQPREQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSEFFLYSK
370 380 390 400 410 420 430
KAKQPREQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSEFFLYSK
370 380 390 400 410 420 430
440 450 460 X
LTVDKSRWQOGNVFSCSVNHEALHNNHYTKSLSPGK
440 450 460 470
LTVDKSRWQOGNVFSCSVNHEALHNNHYTKSLSPGK
440 450 460 470

7. US-09-499-662-89 (1-470)

US-09-408-646-14 Sequence 145, Application US/09408646A

Sequence 145, Application US/09408646A

GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa

APPLICANT: Haruyama, Hideyuki

APPLICANT: Nakahara, Kaori

APPLICANT: Tamaki, Ikuko

APPLICANT: Takahashi, Tohru

TITLE OF INVENTION: Anti-Fas Antibodies

FILE REFERENCE: 990540/HG

CURRENT APPLICATION NUMBER: US/09/408,646A

CURRENT FILING DATE: 1999-09-30

EARLIER APPLICATION NUMBER: JP 10-276881

EARLIER FILING DATE: 1998-09-30

NUMBER OF SEQ ID NOS: 165

SEQ ID NO 145

LENGTH: 470

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designed heavy

OTHER INFORMATION: chain of humanized anti-Fas antibody

Initial Score = 468 Optimized Score = 468 Significance = 2.99
Residue Identity = 99% Matches = 466 Mismatches = 4
Gaps = 0 Conservative Substitutions = 0

X 10 20 30 40 50 60 70
MGWSCILFLVATATGVHSQVQLVOSGAIEVKKPGASVKVSKASGVTFTSYNMQWVKQAPGORLEWGEIDP
150 160 170 180 190 200 210
MGWSCILFLVATATGVHSQVQLVOSGAIEVKKPGASVKVSKASGVTFTSYNMQWVKQAPGORLEWGEIDP
150 160 170 180 190 200 210
X 10 20 30 40 50 60 70

SDSYTYNOKFKGKATLTVDTSSTAYMELSLRSEDYAVYYCARNRDYSNNWYFDVWGEGTLVTVSSASTK
80 90 100 110 120 130 140
SDSYTYNOKFKGKATLTVDTSSTAYMELSLRSEDYAVYYCARNRDYSNNWYFDVWGEGTLVTVSSASTK
80 90 100 110 120 130 140

150 160 170 180 190 200 210
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 |||||
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 150 160 170 180 190 200 210
 220 230 240 250 260 270 280
 GTQTYICNVNHRKPSNTKVDKREPKSCDTHNCPAPPELLGSPVFLPPKPKDTLMSRTEVTCVVD
 |||||
 GTQTYICNVNHRKPSNTKVDKREPKSCDTHNCPAPPELLGSPVFLPPKPKDTLMSRTEVTCVVD
 220 230 240 250 260 270 280
 290 300 310 320 330 340 350 360
 VSHEDPEVFNMYVGVGVHNAKTRPREQYNSTVAVSVLVLMQDLNGEKYKCKVSNKALPAPDIETIS
 |||||
 VSHEDPEVFNMYVGVGVHNAKTRPREQYNSTVAVSVLVLMQDLNGEKYKCKVSNKALPAPDIETIS
 290 300 310 320 330 340 350 360
 370 380 390 400 410 420 430
 KAKGPREQVYTLPPSRREMTKNQVSLTCLVKGFPSPDIAYEMESNGOPENNKTTPPVLDSDGSFFLYSK
 |||||
 KAKGPREQVYTLPPSRREMTKNQVSLTCLVKGFPSPDIAYEMESNGOPENNKTTPPVLDSDGSFFLYSK
 370 380 390 400 410 420 430
 440 450 460 470
 LTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPGK
 |||||
 LTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPGK
 440 450 460 470

8. US-09-499-662-89 (1-470)
 US-09-408-646-15 Sequence 157, Application US/09408646A

Sequence 157, Application US/09408646A
 GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
 APPLICANT: Haruyama, Hideyuki
 APPLICANT: Nakahara, Kaori
 APPLICANT: Tamaki, Ikuko
 APPLICANT: Takahashi, Tohru
 TITLE OF INVENTION: Anti-Fas Antibodies
 FILE REFERENCE: 990540/HG
 CURRENT APPLICATION NUMBER: US/09/408,646A
 CURRENT FILING DATE: 1999-09-30
 EARLIER APPLICATION NUMBER: JP 10-276881
 EARLIER FILING DATE: 1998-09-30
 NUMBER OF SEQ ID NOS: 165
 SEQ ID NO 157
 LENGTH: 470
 TYPE: PRT
 ORGANISM: Artificial Sequence

OTHER INFORMATION: Description of Artificial Sequence: Designed
 OTHER INFORMATION: heavy chain of humanized anti-Fas antibody

Initial Score - 467 Optimized Score - 467 Significance - 2.99
 Residue Identity - 98% Matches - 463 Mismatches - 5
 Gaps - 0 Conservative Substitutions - 2

X 10 20 30 40 50 60 70
 MGNSCIILFLVATATGVHSGVOVLQSGAEVYKRGASVYKCRKASGTYFTSYMMQWYKQAPGQGLEMMGEIDP
 |||||
 MGNSCIILFLVATATGVHSGVOVLQSGAEVYKRGASVYKCRKASGTYFTSYMMQWYKQAPGQGLEMMGEIDP
 X 10 20 30 40 50 60 70
 SDSYTYNOKFKGKATLVDTASATAYMELSSLRSDTAVYICARRNDYSNNMYFEDVWEGTLVTVSSASTK
 |||||
 SDSYTYNOKFKGKATLVDTASATAYMELSSLRSDTAVYICARRNDYSNNMYFEDVWEGTLVTVSSASTK
 80 90 100 110 120 130 140
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 |||||
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 80 90 100 110 120 130 140
 PSVYVPLAPGSAQFTNSMTVLGCLVGVFPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL

150 160 170 180 190 200 210
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 |||||
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 150 160 170 180 190 200 210
 220 230 240 250 260 270 280
 GTQTYICNVNHRKPSNTKVDKREPKS
 |||||
 GTQTYICNVNHRKPSNTKVDKREPKS
 220 230 240 250 260 270 280
 290 300 310 320 330 340 350 360
 VSHEDPEVFNMYVGVGVHNAKTRPREQYNSTVAVSVLVLMQDLNGEKYKCKVSNKALPAPDIETIS
 |||||
 VSHEDPEVFNMYVGVGVHNAKTRPREQYNSTVAVSVLVLMQDLNGEKYKCKVSNKALPAPDIETIS
 290 300 310 320 330 340 350 360
 370 380 390 400 410 420 430
 KAKGPREQVYTLPPSRREMTKNQVSLTCLVKGFPSPDIAYEMESNGOPENNKTTPPVLDSDGSFFLYSK
 |||||
 KAKGPREQVYTLPPSRREMTKNQVSLTCLVKGFPSPDIAYEMESNGOPENNKTTPPVLDSDGSFFLYSK
 370 380 390 400 410 420 430
 440 450 460 470
 LTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPGK
 |||||
 LTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPGK
 440 450 460 470

9. US-09-499-662-89 (1-470)
 US-09-408-646-9 Sequence 9, Application US/09408646A

Sequence 9, Application US/09408646A
 GENERAL INFORMATION:

APPLICANT: Serizawa, Nobufusa
 APPLICANT: Haruyama, Hideyuki
 APPLICANT: Nakahara, Kaori
 APPLICANT: Tamaki, Ikuko
 APPLICANT: Takahashi, Tohru
 TITLE OF INVENTION: Anti-Fas Antibodies
 FILE REFERENCE: 990540/HG
 CURRENT APPLICATION NUMBER: US/09/408,646A
 CURRENT FILING DATE: 1999-09-30
 EARLIER APPLICATION NUMBER: JP 10-276881
 EARLIER FILING DATE: 1998-09-30
 NUMBER OF SEQ ID NOS: 165
 SEQ ID NO 9
 LENGTH: 464
 TYPE: PRT
 ORGANISM: Mus musculus

Initial Score - 229 Optimized Score - 410 Significance - 1.24
 Residue Identity - 70% Matches - 331 Mismatches - 107
 Gaps - 6 Conservative Substitutions - 26

X 10 20 30 40 50 60 70
 MGNSCIILFLVATATGVHSGVOVLQSGAEVYKRGASVYKCRKASGTYFTSYMMQWYKQAPGQGLEMMGEIDP
 |||||
 MGNSCIILFLVATATGVHSGVOVLQSGAEVYKRGASVYKCRKASGTYFTSYMMQWYKQAPGQGLEMMGEIDP
 X 10 20 30 40 50 60 70
 SDSYTYNOKFKGKATLVDTASATAYMELSSLRSDTAVYICARRNDYSNNMYFEDVWEGTLVTVSSASTK
 |||||
 SDSYTYNOKFKGKATLVDTASATAYMELSSLRSDTAVYICARRNDYSNNMYFEDVWEGTLVTVSSASTK
 80 90 100 110 120 130 140
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 |||||
 GSVFPLAPSSKSTSGTALGCLVDPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL
 80 90 100 110 120 130 140
 PSVYVPLAPGSAQFTNSMTVLGCLVGVFPPEPTVYVMSNGALNSGHTPPAVYQSSGLSSSVTVVPSSTL

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